



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,651	08/27/1999	MICHAEL GREMINGER	31949	9479

116 7590 01/26/2007  
PEARNE & GORDON LLP  
1801 EAST 9TH STREET  
SUITE 1200  
CLEVELAND, OH 44114-3108

EXAMINER
----------

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
----------	--------------

2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/385,651	GREMINGER, MICHAEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Remarks***

1. The applicant has amended the claims and asserts that the prior art fails to disclose the newly recited language.
2. Regarding newly recited language "each (audio track) including audio signals representing common daily experiences", "an audio storage medium having a plurality of storage segments each for storing audio signals representing common daily experiences", and "an audio test signal representing common daily experiences", the examiner asserts that this is not disclosed in the specification. The specification discloses on page 2, that the in situ tuning is then further conducted by means of the diagnostic data and/or on the basis of the assessments of the individual concerning practical experience hearing, that is, impressions from everyday life. The specification also discloses that an audio CD contains audio test signals, i.e. music sounds and can also contain specific language recognition. This does not equate to each audio track, storage segment or audio test signal including audio signals representing common daily experiences as claimed.
3. Claims 2-10 are cancelled and claim 24 is withdrawn from consideration.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2615

5. **Claims 1,12-23** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **Claims 1,20,22 and 23** recite " each (audio track) including audio signals representing common daily experiences", " an audio storage medium having a plurality of storage segments each for storing audio signals representing common daily experiences", and "an audio test signal representing common daily experiences", the examiner asserts that this is not disclosed in the specification. The specification discloses on page 2, that the in situ tuning is then further conducted by means of the diagnostic data and/or on the basis of the assessments of the individual concerning practical experience hearing, that is, impressions from everyday life. The specification also discloses that an audio CD contains audio test signals, i.e. music sounds and can also contain specific language recognition. This does not equate to each audio track, storage segment or audio test signal including audio signals representing common daily experiences as claimed. The newly recited claim language is not disclosed in the specification.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1,11-23** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **Claims 1,20,22 and 23** recite " each (audio track)

Art Unit: 2615

including audio signals representing common daily experiences", " an audio storage medium having a plurality of storage segments each for storing audio signals representing common daily experiences", and "an audio test signal representing common daily experiences", the examiner asserts that this is not disclosed in the specification. The specification discloses on page 2, that the in situ tuning is then further conducted by means of the diagnostic data and/or on the basis of the assessments of the individual concerning practical experience hearing, that is, impressions from everyday life. The specification also discloses that an audio CD contains audio test signals, i.e. music sounds and can also contain specific language recognition. This does not equate to each audio track, storage segment or audio test signal including audio signals representing common daily experiences as claimed. Furthermore, since the specification does not disclose what constitutes common daily experiences, the examiner has interpreted any audio signal as representing common daily experiences.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2615

9. **Claims 1,12-15,17,19,20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moser et al. (WO 85/00509) in view of Engebreston et al. (US 4,548,082) in further view of Delisle et al. (US 3,809,811).

Regarding **claim 1**, Moser discloses an apparatus for fitting a hearing device fitting device (Figure 1, Figure 16) comprising:

a data entry device (human interfaces 68 and 70 Figure 1; 370 Figure 16);

a computing device (308, Figure 16), (connected on an input side with a connection for connecting to said data entry device (human interfaces 68 and 70 Figure 1; 370 Figure 16) and

further comprising an audio storage medium play-back unit storing a plurality of audio tracks each including audio signals representing common daily experiences (Moser teaches that the CD stores digital test signals ; page 14, lines 23-25; track is defined as a distinct selection of music from a recording or a compact disc) and having a control input connected to another output of said computing device output (Figure 16) and having an audio output connectable to a loudspeaker unit input (310, Figure 16) (pages 28, line 27-page 30) .

wherein said computing device selects another one of said audio tracks including audio signals representing common daily experiences (Moser teaches that the test signals stored as on the CD 304 may be reproduced upon selection by the common unit (370); page 30 ,lines 18-11;page 19, lin3 21-page 20, line 5).

a control signal at said output depending on data input to said connection for data entry (page 29, lines 23-30).

Moser in Figure 16 discloses communication between the control unit and the hearing aid and of assessment data entered into said data entry device (page 30 ,lines 18-11;page 19, lin3 21-page 20, line 5).

Moser fails to disclose a computing device having an output side with a connection for a hearing device and assessment data entered into said data entry device based on perceptions of a user wearing said hearing device listening to said audio tracks.

Engbreton discloses a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) , of assessment data entered into said data entry device based on perceptions of said individual wearing said hearing device and listening to said audio tracks including audio signals representing common daily experiences and of computing a control signal based on said assessment data, wherein said control signal is applied to said other output of said computing device (column 7, lines 10-20; Engbreton teaches that a repertoire of sound are stored on the disc including tones and that the patient can communicate his response to the data using the IRU).

It would have been obvious to modify Moser so that the output of the control unit is connected to a hearing device and to have assessment data entered into said data entry device based on perceptions of a user wearing a hearing device listening to audio tracks as taught by Engbreton in order to

automatically control the characteristics of the hearing aid (Engbreton, column 6, lines 46-48).

Moser as modified by Engbreton fails to teach of automatic selection of test signals based on user response.

Delisle discloses a system for automatically an audiometric test wherein, based on the user's response (control signal) , the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Moser as modified by Engbreton to have automatic selection of the test signals or test tones based on the user response in order to provide hearing testing that is completely managed by a computer program without the intervention of an operator.

Regarding **claim 12**, Moser as modified by Engbreton and Delisle discloses wherein said playback unit contains at least one audio storage chip Moser teaches of the playback unit as a compact disc player (52). He further teaches that the information stored on the compact disc (54) is listed in a stored table of contents (page 18, lines 30-33). There is therefore implicitly some sort of audio storage chip as claimed.

Regarding **claim 13**, Moser as modified by Engbreton and Delisle wherein said playback unit is a CD playback unit. Moser teaches of the playback unit as a compact disc player (302). He further teaches that the



Art Unit: 2615

information stored on the compact disc (304) is listed in a stored table of contents (page 28, lines 28-35).

Regarding **claim 15**, Moser as modified by Engbreston and Delisle discloses further comprising a decoding unit, wherein said playback unit is an audio CD playback unit generating a specification of an extent of at least one of the segments on the audio storage medium in said playback unit, and wherein said specification is fed from an output of said playback unit to said decoding unit which then generates a control signal for the operation of said playback unit (Figure 16, page 28, line30-page 29, line 30).

Regarding **claim 16**, Moser as modified by Engbreston and Delisle discloses the hearing device fitting device according to claim 1, wherein said fitting device further comprises a set-value comparing unit having an output operationally connected to a level control input of said playback unit for controlling said audio –output (page 25, lines 2-7), wherein

the hearing device is connected to said hearing device output, the hearing device having a level detector (350, Figure 16) which is connected to an acoustical/electrical converter of the hearing device, such that said computing unit generates, on a level detector control output, a level detector control signal for controlling an operational connection between a level detector output of said level detector and a computing unit control input of said computing unit, said computing unit control input also operationally connected to said set-value comparing unit, and wherein

Art Unit: 2615

said computing unit enables said playback unit for playback of a predetermined storage segment of the audio storage medium upon receipt of a control signal on said computing unit control input (Figure 16, page 29, lines 17-30) , and further wherein

said computing unit controls establishing said operational connection of said level detector output to said computing unit control input (Figure 16, page 29, lines 17-30)

Regarding **claim 17**, Moser as modified by Engebreston and Delisle discloses said computing unit further including a selection unit (Moser, X-Y tablet 68; page 15, lines 23-30; Figure 1), wherein said connection for data entry is connected to a human input device and is operationally connected with said selection unit, a selection output of said selection unit being operationally connected to said selection input of said playback unit (page 29, lines 23-30; Figure 1 and Figure 16).

Regarding **claim 19**, Moser as modified by Engebreston and Delisle discloses wherein said connection for data entry is connected to a human input device and to a decoding unit (disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27) which generates, from input data from said human input device, according to stored decoding tables, output data to an output of said decoding unit that is operationally connected with another input of said computing unit ((disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27; Figure 16, page 29, lines 23-30 ).

**Claims 20 and 22** share common elements.

Regarding **claims 20 and 22**, Moser discloses a hearing device fitting arrangement (Figure 1 and Figure 16) comprising:

- an audio storage playback unit (302,304, Figure 16) including:

- an audio storage medium having a plurality of storage segments each form storing audio signals representing common daily experiences (Moser teaches that the CD stores digital test signals ; page 14, lines 23-25; track is defined as a distinct selection of music from a recording or a compact disc; pages 29, line 23-30);

- a control input having a selection input for selecting any of a plurality of said storage segments (page 29, lines 23-30); and

- an audio output( speaker 310) ;

- a loudspeaker operationally connectable to said audio output of said playback unit (310, Figure 16); and

- a computing unit (308) including:

- a data input for data entry (370) by an individual carrying said hearing device to be fitted ;

- a hearing device output for operationally connecting to the hearing device (312);

- and an audio control output for operationally connecting to said control input of said audio storage medium playback unit(Figure 16);

wherein said computing unit is adapted for selecting another one of the plurality of storage segments (page 28, lines 28-page 29).

The only difference between claim 20 and 22 is that claim 22 recites " a hearing device output for operationally connecting to the hearing device for programming said hearing device" where claim 20 recites "a hearing device output for operationally connecting to the hearing device".

Moser in Figure 16 discloses communication between the control unit and the hearing aid. Moser in Figure 16 discloses communication between the control unit and the hearing aid and of assessment data entered into said data entry device (page 30 ,lines 18-11;page 19, line 21-page 20, line 5). Moser discloses that the CD has test signals on it.

Moser fails to disclose a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) and that said data input for said individual to input assessment data for assessing said hearing aid during playback of one of said storage segments and selecting depending on said assessment data entered by user

Engbreton discloses a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) , of a data unit for said individual to input assessment data for assessing said hearing aid during playback of one of said storage segments and of computing a control signal for said audio control output in dependency upon said assessment data entered by said individual (column 7, lines 10-20;

Art Unit: 2615

Engbreton teaches that a repertoire of sound are stored on the disc including tones and that the patient can communicate his response to the data using the IRU).

It would have been obvious to modify Moser so that the output of the control unit is connected to a hearing device and to have assessment data entered into said data entry device to input assessment data for assessing hearing aid during playback as taught by Engbreton in order to control the characteristics of the hearing aid (Engbreton, column 6, lines 46-48).

Moser as modified by Engbreton fails to explicitly teach of automatic selection of test signals based on user response.

Delisle discloses a system for automatically an audiometric test wherein, based on the user's response, the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Moser as modified by Engbreton to have automatic selection of the test signals or test tones based on the user response in order to provide hearing testing that is completely managed by a computer program without the intervention of an operator.

Regarding **claim 21**, Moser as modified by Engbreton and Delisle discloses wherein said connection for data entry is connected to a human input device and to a decoding unit (disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27) which generates, from input data from said human

Art Unit: 2615

input device, according to stored decoding tables, output data to an output of said decoding unit that is operationally connected with another input of said computing unit ((disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27; Figure 16, page 29, lines 23-30 ).

9. **Claims 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Moser et al. (WO 85/00509) as applied above to claim 1 and Engebreston et al. (US 4,548,082) as applied above to claim 1 and Delisle et al. (US 3,809,811) as applied above to claim 1, in further view of Geiger (US 4,807,208).

Regarding claim 14, Moser as modified by Engebreston and Delisle fails to disclose but Geiger teaches of further comprising a comparer unit that tests the audio storage medium in said playback unit for a predetermined identification and which disables said playback unit on non-recognition of said predetermined identification (column 3, lines 18-27 and lines 30-34). It would have been obvious to modify Moser as modified by Engebreston and Delisle by having a test that determines if the audio storage medium matches some predetermined identification as taught by Geiger so that only desired marked pieces will be played (Geiger; column 3, lines 25-34)

10. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Basseas (U.S. Patent 6,674,867) as modified by Delisle et al. (US 3,809,811).

Art Unit: 2615

Regarding **claim 23**, Basseas discloses a method for fitting a hearing device insitu (insitu is defined as in its natural position) (Figure 1) comprising the steps of:

applying a hearing device to an individual(Figure 1);

subjecting the individual to an audio test signal representing common daily experiences (column 4, lines 11-17);

having the individual appraise said audio test signal (column 4, lines 18-24);

and selecting, in dependency of said appraising, a subsequent audio test signal representing common daily experiences (column 2, lines 36-48) (column 4, lines 5-column 5).

Basseas fails to explicitly teach of automatic selection of test signals based on user response.

Delisle discloses a system for automatically an audiometric test wherein, based on the user's response, the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Basseas to have automatic selection of the test signals or test tones based on the user response in order to provide hearing testing that is completely managed by a computer program without the need for intervention by an operator.

Application/Control Number: 09/385,651

Page 15

Art Unit: 2615

11. II



VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600